

YSV24 SERIES

24W



Features

- Energy efficiency level VI
- Class II Power Supply
- 3 Years Warranty
- Universal AC input/Full range
- No load power consumption < 0.1W
- Protections: Short Circuit /Over Load / Over Voltage
- -20~+60℃ wide range working temperature

Applications

- Home Appliances
- Access Control Systems
- Consumer Electronic Devices
- Telecommunication Devices



Model Description

YSV24 - XXXYYYY - [] - D1J

DC Plug Type

D1J: standard model, $\phi 2.1 \times \phi 5.5 \times 11\text{mm}$, C+, tuning fork type
Other options available by customer requested (see Page 3-5)

AC Plug Type

Blank: All universal version with interchangeable plugs
Separate plug available by customer requested (see page 3)

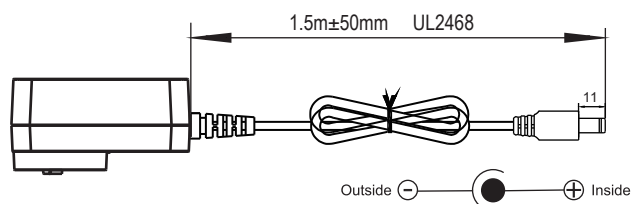
Output Current

Output Voltage

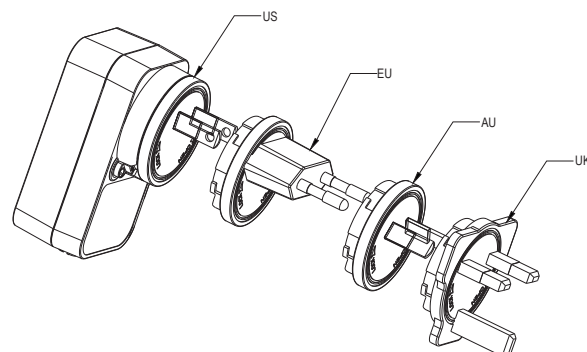
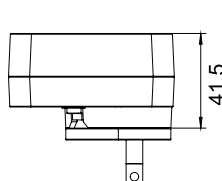
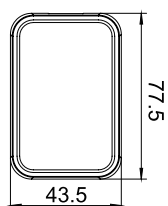
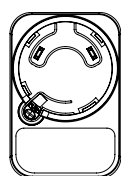
Series Name

Dimensions and installation

(Unit: mm , tolerance: $\pm 1\text{mm}$)



Standard Cable	1.2m UL2468 (Option: UL2464, UL1185)
5 ~ 12V	20AWG
15 ~ 24V	22AWG
48V	24AWG



File last modification time: 2025-2-25

Specification

Model	Order P/N	YSV24-0503000-D1J	YSV24-0902500-D1J	YSV24-1202000-D1J	YSV24-1501600-D1J	YSV24-2401000-D1J	YSV24-4800500-D1J
	Safety Model No.	YSV24-0503000	YSV24-0902500	YSV24-1202000	YSV24-1501600	YSV24-2401000	YSV24-4800500
Output	DC Voltage	5V	9V	12V	15V	24V	48V
	Rated Current	3A	2.5A	2A	1.6A	1A	0.5A
	Rated Power	15W	22.5W	24W	24W	24W	24W
	Ripple & Noise(max.)	100mVp-p	100mVp-p	120mVp-p	240mVp-p	240mVp-p	400mVp-p
	Voltage Tolerance	±5%	±5%	±5%	±5%	±5%	±5%
	Line Regulation	±3%	±3%	±3%	±3%	±3%	±3%
	Load Regulation	±5%	±5%	±5%	±5%	±5%	±5%
	Setup,Rise,Hold up Time	0.9s,40ms,30ms/230VAC(at full load)			2.0s,40ms,12ms/115VAC(at full load)		
Input	Rated Voltage Range	100-240VAC					
	Voltage Range	90-264VAC					
	Frequency Range	50/60Hz					
	AC Current	0.8A/100VAC		0.6A/240VAC			
	Inrush Current	Cold Start 80A/200us at 240VAC 50Hz			Cold Start 50A/200us at 100VAC 50Hz		
	Leakage Current	<0.5mA/240VAC					
	Efficiency	81.5%	86%	87%	87.5%	87.5%	88.5%
	No Load Power Consumption	<0.1W					
Protection	Over Load	105~150%					
		Hiccup mode, recovers automatically after fault condition is removed.					
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.					
	Over Voltage	120~180%					
Hiccup mode, recovers automatically after fault condition is removed.							
Ambient	Working TEMP.	-20 ~ +60 ℃ (Please refer to “Derating Curve”section)					
	Working Humidity	25 ~ 75%RH Non-condensing					
	Storage TEMP. Humidity	-40 ~ +80 ℃ ,10 ~ 95%RH Non-condensing					
	TEMP. Coefficient	±0.03%/(0 ~ 40 ℃)					
	Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
Safety	Safety Standards	IEC 62368-1, EN 62368-1, AS/NZS 62368-1, UL 62368-1					
	Withstand Voltage	I/P-O/P: 3KVAC/1min					
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25 ℃ / 70% RH					
EMC	EMC Emission	Parameter	Standard		Test Level		
		Conducted	EN55032(CISPR32), FCC Part 15 Subpart B		CLASS B		
		Radiated	EN55032(CISPR32), FCC Part 15 Subpart B		CLASS B		
		Harmonic Current	EN61000-3-2		CLASS B		
		Voltage flicker	EN61000-3-3		CLASS B		
	EMC Immunity	Parameter	Standard		Test Level		
		ESD	EN61000-4-2		Level 3, 8KV air, criteria A		
		Radiated Susceptibility	EN61000-4-3		Level 3, criteria A		
		EFT/Burest	EN61000-4-4		Level 3, criteria A		
		Surge	EN61000-4-5		Level 4, 2KV/L-N, criteria A		
		Conducted	EN61000-4-6		Level 3, criteria A		
		Magnetic Field	EN61000-4-8		Level 4, criteria A		
		Voltage Dips and interruptions	EN61000-4-11		> 95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods		
Others	Packing	190g/pcs; 49.5 x 28.5 x 20 cm; 50pcs/carton					
	Dimension (LxWxH)	77.5 x 43.5 x 41.5 mm					
	Plug and Cable	See page 3~5; Other type available by customer requested					
	MTBF	50.5Khrs min. MIL-HDBK-217F(25 ℃)					
Note	1. Tolerance: includes set up tolerance, line regulation and load regulation. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3.Line regulation is measured from low line to high line at rated load. 4.Load regulation is measured from 0% to 100% rated load. 5. All parameters NOT specially mentioned are measured at nominal voltage input, rated load and 25 ℃ of ambient temperature. 6. De-rating may be needed under low input voltages. Please refer to “Static Characteristic” sections for details. 7. The power supply is considered as a component that will be operated in combination with final equipment.Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.						

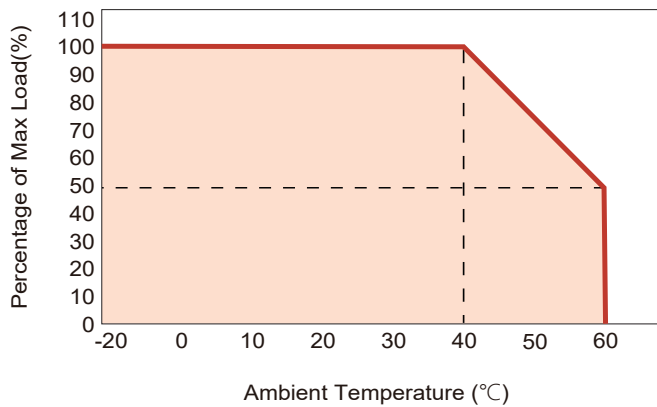
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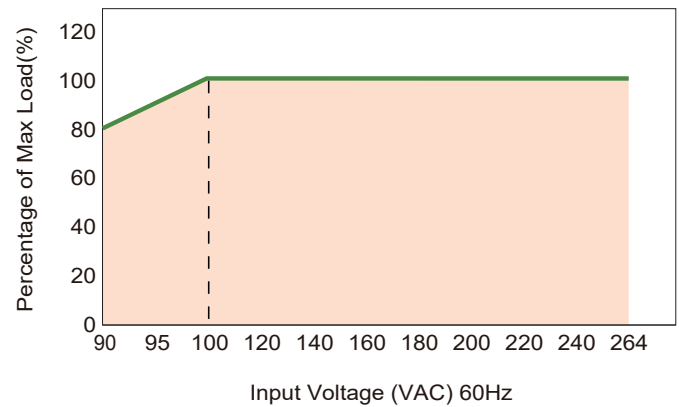
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Feature Curves

1. Derating Curve

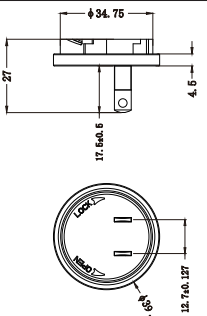
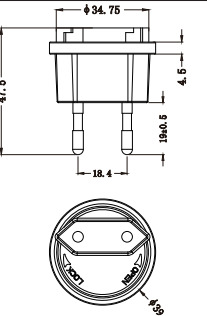
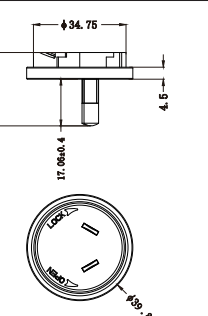
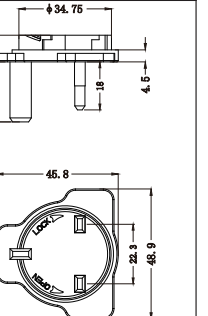
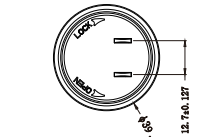
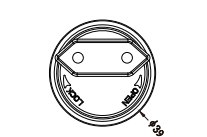
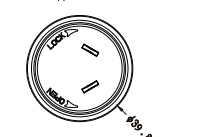
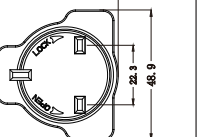


2. Static Characteristics



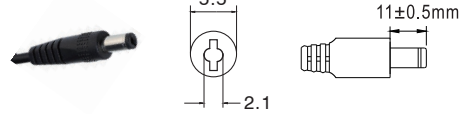
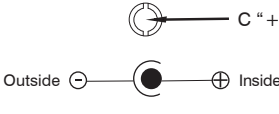
Input Plug Type (Option)

Standard models: All

AC Plug	Interchangeable Type(Unfoldable; AC Pin fixed)			
	US	EU	AU	UK
Dimension				
				

DC Output Plug (Option)

Standard Model : D1J

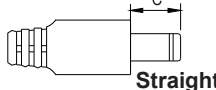
D1J	Pin Assignment
	

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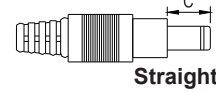
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DC Output Plug (Option)

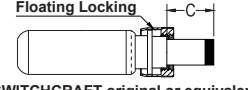
(Unit: mm , tolerance: $\pm 0.5\text{mm}$)

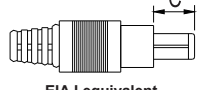
Tuning Fork Style				Straight
Type No.	A		B	C
	OD		ID	L
D1I	5.5		2.1	9.5
D1L	5.5		2.5	9.5
D1M	5.5		2.5	11.0

Tuning Fork Style				Right-angled
Type No.	A		B	C
	OD		ID	L
D1IR	5.5		2.1	9.5
D1JR	5.5		2.1	11.0
D1LR	5.5		2.5	9.5
D1MR	5.5		2.5	11.0

Barrel Style				Straight
Type No.	A		B	C
	OD		ID	L
D2I	5.5		2.1	9.5
D2J	5.5		2.1	11.0
D2L	5.5		2.5	9.5
D2M	5.5		2.5	11.0

Barrel Style				Right-angled
Type No.	A		B	C
	OD		ID	L
D2IR	5.5		2.1	9.5
D2JR	5.5		2.1	11.0
D2LR	5.5		2.5	9.5
D2MR	5.5		2.5	11.0

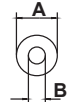
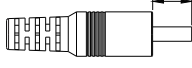
Lock Style				Floating Locking SWITCHCRAFT original or equivalent
Type No.	A		B	C
	OD		ID	L
D2S(S761K)	5.53		2.03	12.06
D2K(761K)	5.53		2.54	12.06
D2C(S760K)	5.53		2.03	9.52
D2D(760K)	5.53		2.54	9.52

Center Pin Style				EIAJ equivalent
Type No.	A		B	C
	OD		ID	L
D4A	5.5		3.4	11.0
D4B	6.5		4.4	11.0
D4C	7.4		5.1	11.0

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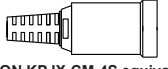
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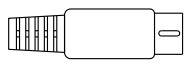
DC Output Plug (Option)

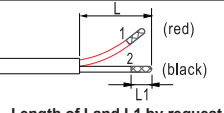
Tuning Fork Style			
	EIAJ equivalent		
Type No.	A	B	C
	OD	ID	L
D3A	2.35	0.7	11.0
D3B	4.0	1.7	11.0
D3C	4.75	1.7	11.0

MIN.Din 3Pin with Lock(male)			
	KYCON KPPX-3P equivalent		
Type No.	Pin Assignment		
	PIN No.	Output	
M6B	1	+Vo	
	2	-Vo	
	3	+Vo	

MIN.Din 4Pin with Lock(male)			
	KYCON KPPX-4P equivalent		
Type No.	Pin Assignment		
	PIN No.	Output	
M7B	1	+Vo	
	2	-Vo	
	3	-Vo	
	4	+Vo	

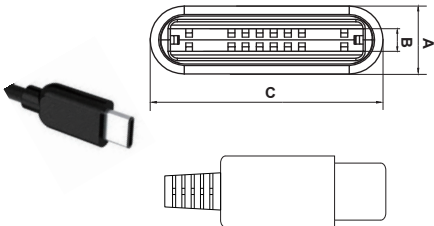
MIN.Din 4Pin with Lock(female)			
	KYCON KPJX-CM-4S equivalent		
Type No.	Pin Assignment		
	PIN No.	Output	
M7BF	1	+Vo	
	2	-Vo	
	3	-Vo	
	4	+Vo	

Barrel Style			
Type No.	Pin Assignment		
	PIN No.	Output	
M1B	1	-Vo	
	2	-Vo	
	3	+Vo	
	4	-Vo	
	5	+Vo	

Stripped and tinned leads		
	Length of Land L1 by request	
	YJ's standard length, L: 30 mm, L1: 5 mm	
	NOTE: The wire color is for reference only, please refer to the actual product	
Type No.	Pin Assignment	
	PIN No.	Output
by customer	1	+Vo
	2	-Vo

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DC Output Plug (Option)

Type-C			
Type No.	A	B	C
	OD	ID	L
C1	2.4	1.3	8.25